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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/836,012	04/17/2001	Jeffrey R. Sampson	10992153-1 (2003309-0013)	6991
22878	7590	02/02/2005	EXAMINER	
AGILENT TECHNOLOGIES, INC. INTELLECTUAL PROPERTY ADMINISTRATION, LEGAL DEPT. P.O. BOX 7599 M/S DL429 LOVELAND, CO 80537-0599			CHUNDURU, SURYAPRABHA	
			ART UNIT	PAPER NUMBER
			1637	
DATE MAILED: 02/02/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/836,012

Applicant(s)

SAMPSON ET AL.

Examiner

Suryaprabha Chunduru

Art Unit

1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 and 74-83 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 74-83 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. Upon reconsideration of the broad scope of the claims the finality of the previous office action is withdrawn and the prosecution is reopened herein.
2. Applicants' response to the office action and amendment filed on December 20, 2004 has been entered.
2. New claims 81-83 are added. Claims 18-73 are cancelled. Claims 7, 12, 14 are amended. Claims 1 -17, and 74-83 are pending.
3. The instant application filed on April 17, 2001 is a CIP of US non provisional application 09/112,437 filed on 7/9/1998 (PAT 6,218,118).

***New grounds of rejections***

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

A. Claims 1-17, 81-83 are rejected under 35 U.S.C. 102(b) as being anticipated by Southern et al. (WO 95/04160).

Southern et al. teach a composition (mixture) of claims 1-2, 7, 12, 14, 81-82, comprising X-mer precursor having a minimum length of 6 nucleotides (see page 5, line 28-36, page 55, line 13-23, page 2, line 27-33), wherein the mixture the mixture has at least complexity of at least 56/N, wherein N represents the number of distinct X-mers (see page 5, line 28-36, Fig. 3a, page 55, line 13-23); wherein the mixture comprises a set of tags (reporter groups) and each tag is

Art Unit: 1637

covalently linked to at least one X-mer through a cleavable linkage (see page 6, paragraph 2, page 7, line 3-6, page 14, line 1-24).

With regard to claims 2, Southern et al. also teach that X-mer precursors comprise isotopic composition (see page 7, line 3-12);

With regard to claims 3-6, Southern et al. teach 4096 different hexanucleotides with known oligonucleotide sequences (which includes sets of X-mers ranging from 128 to 512) (see page 5, line 28-30, page 42, line 1-30);

With regard to claim 7, Southern et al. teach that the number tags distinguishable by mass spectrometry includes 20- 4096 (each X-mer having a unique tag) (see page 5, line 28-30, page 2, lines 27-33);

With regard to claims 8-11, Southern et al. teach that 4096 number of unique tags (which includes the number ranging from 10-5000) (see page 5, line 28-30);

With regard to claim 12-17, 83, Southern et al. teach that said number of tags is greater than a mass complexity of a natural equivalent (without a tag) and the increment in adding a reporter is larger than the mass difference between the smallest and the largest tag (page 7, line 27-35, page 8, table 2, that indicates 0.5%-100% number of tags).

With regard to claim 6, Brenner teaches that the nucleotide sequences of the precursors of said mixture are known (see col. 7, table II);

B. Claims 1, 3-6, 74-80 are rejected under 35 U.S.C. 102(b) as being anticipated by Brenner (USPN. 5,654,413).

Brenner teaches a composition (mixture) of claims 1, 3-5, comprising X-mer precursor having a minimum length of 3 nucleotides (see col. 3, line 15-67, col. 4, line 1-8, col. 7, line 39-

60), wherein the mixture the mixture has at least complexity of at least  $56/N$ , wherein  $N$  represents the number of distinct X-mers (see col. 7, table II shows complexity of at least  $56/N$ ); wherein the mixture comprises a set of tags and each tag is covalently linked to at least one X-mer through a cleavable linkage (see col. 9, line 25-67, col. 10, line 1-67, col. 11, line 1-65).

With regard to claim 6, Brenner teaches that the nucleotide sequences of the precursors of said mixture are known (see col. 7, table II);

With regard to claims 74-80, Brenner teaches a kit composition comprising said mixture of x-mer precursors (comprising natural or non-natural nucleotides, see col. 5, line 37-44), enzymes such as polymerases (polymerases are also considered as condensing agent herein, since the instant specification did not define the term condensing agent nor given any specific examples of a condensing agent), ligases, an array comprising surface and multiplicity of sequence probes (oligonucleotides) attached to it (see col. 23, line 40-57, col. 17, line 35-63, col. 18, line 43-67). Thus the disclosure of Brenner meets the limitations in the instant claims.

### ***Response to Arguments***

5. Applicants' response to arguments and amendment have been entered and found persuasive

6. With reference to the rejection made under double patenting, Applicant's arguments and the terminal disclaimer have been fully considered and the rejection is withdrawn in view of the terminal disclaimer.

### ***Conclusion***


No claims are allowable.

Art Unit: 1637

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 571-272-0783. The examiner can normally be reached on 8.30A.M. - 4.30P.M , Mon - Friday,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on 571-272-0782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Suryaprabha Chunduru  
Examiner  
Art Unit 1637

  
JEFFREY FREDMAN  
PRIMARY EXAMINER  
